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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/705,461	11/10/2003	Shinichi Shinohara	SHX 318A	5739
23581	7590 07/13/2006		EXAMINER	
KOLISCH HARTWELL, P.C.			GOFF II, JOHN L	
200 PACIFIC BUILDING 520 SW YAMHILL STREET			ART UNIT	PAPER NUMBER
PORTLAND, OR 97204			1733	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/705,461	SHINOHARA ET AL.			
Office Action Summary	Examiner	Art Unit			
	John L. Goff	1733			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE!	J. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on 16 Ju</li> <li>2a) ☐ This action is FINAL.</li> <li>2b) ☒ This</li> <li>3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-16 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.	•			
Application Papers					
9)☐ The specification is objected to by the Examine 10)☑ The drawing(s) filed on 10 November 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex	re: a) $\square$ accepted or b) $\square$ object drawing(s) be held in abeyance. Set tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burear * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No. <u>09/778,232</u> . ed in this National Stage			
·					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:				

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### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/06 has been entered.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 1, 2, 10-12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable 4. over Otsuka et al. (JP 10-312591 and see also the abstract and machine translation) in view of Naka et al. (U.S. Patent 5,935,331).

Otsuka et al. disclose an apparatus capable of bonding two optical disc substrates together. Otsuka et al. teach the apparatus comprises a lower mounting support capable of mounting an optical disc substrate and capable of spinning, an upper mounting support opposed to the lower mounting support capable of mounting an optical disc substrate, an adhesivesupplying nozzle perpendicular to the lower mounting support with its tip pointing downward capable of supplying a ring shaped adhesive liquid film and/or a dot-shaped adhesive liquid film onto an optical disc substrate while the substrate is spinning, and a lifting member capable of moving the upper mounting support toward the lower mounting support (Figure 1 and Paragraphs 16-20). Otsuka et al. are silent as to using the adhesive-supplying nozzle as an electrode that cooperates with a second electrode adjacent the lower mounting support capable of forming an electrical field therebetween. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the adhesive-supplying nozzle in Otsuka et al. as an electrode that cooperates with a second electrode adjacent the lower mounting support as shown by Naka et al. such that the apparatus is capable of applying the adhesive uniformly.

Naka et al. disclose an apparatus capable of uniformly applying a liquid coating to a substrate such as an optical disc comprising a lower mounting support capable of supporting a substrate, a liquid coating nozzle perpendicular to the lower mounting support with its tip pointing downward capable of supplying a liquid adhesive onto a substrate wherein the liquid coating nozzle is a first electrode, connected to a terminal of an electric power supply, that

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cooperates with a second electrode adjacent the lower mounting support, which is connected to another terminal of the electric power supply, capable of forming an electrical field therebetween to uniformly deposit the liquid coating by electrostatic force (Figure 11 and Column 14, lines 22-36).

Regarding the limitations in the claims directed to the material worked upon, i.e. the optical disc substrates and the adhesive, it is noted the material worked upon is given little weight in determining the patentability of the apparatus (See MPEP 2115) other than the apparatus taught by Otsuka et al. as modified by Naka et al. is capable of working on the material.

Regarding the limitations in the claims directed to functional language/intended use, i.e. the supplying of an adhesive to one or both of optical disc substrates, the generating of an electric field, the joining of two optical disc substrates, the rotating/spinning of the optical discs, the application of a ring-shaped or dot-shaped adhesive, and the application of a liquid adhesive including a tapered end, it is noted a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim (See MPEP 2114). The structural limitations disclosed by Otsuka et al. as modified by Naka et al. meet the claimed structural limitations, and as such the apparatus disclosed by Otsuka et al. as modified by Naka et al. is capable of performing the functional limitations/intended use.

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5. Claims 3, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Otsuka et al. and Naka et al. as applied to claims 1, 2, 10-12, 14 and 15 above, and further in

view of Kotoyori et al. (JP200036134 with U.S. Patent 6,228,203 used as an English translation).

Regarding claim 3, Otsuka et al. and Naka et al. as applied above teach all of the limitations in claim 3 except for a specific teaching of using a plurality of adhesive-supplying nozzles in a circular shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the adhesive-supplying nozzle taught by Otsuka et al. as modified by Naka et al. a plurality of adhesive-supplying nozzles in a circular shape as shown by Kotoyori et al. such that the apparatus is capable of quickly applying the adhesive.

Regarding claim 13, Otsuka et al. and Naka et al. as applied above teach all of the limitations in claim 13 except for a specific teaching of the lifting member moving the lower mounting support toward the upper mounting support as opposed to moving the upper mounting support toward the lower mounting support as taught by Otsuka et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lifting member taught by Otsuka et al. as modified by Naka et al. to move the lower mounting support toward the upper mounting support as opposed to the opposite as using the lifting member in this manner was known as shown by Kotoyori et al. wherein only the expected results of moving the upper and lower mounting supports toward each other would be achieved.

Regarding claim 16, Otsuka et al. and Naka et al. as applied above teach all of the limitations in claim 16 except for a specific teaching of rotating the adhesive-supplying nozzle relative to the lower mounting support as opposed to rotating the lower mounting support relative to the adhesive-supplying nozzle as taught by Otsuka et al. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to rotate the adhesive-supplying nozzle and lower mounting support relative to each other as taught by Otsuka et al. as modified by Naka et al. by rotating the adhesive-supplying nozzle relative to the lower mounting support which was known as shown by Kotoyori et al. wherein only the expected results of rotating the adhesive-supplying nozzle and lower mounting support relative to each other would be achieved.

Kotoyori et al. disclose an apparatus capable of bonding two optical disc substrates together comprising a lower mounting support capable of mounting an optical disc substrate, an adhesive-supplying nozzle or plurality of adhesive-supplying nozzles in a circular shape perpendicular to a lower mounting support with its tip(s) pointing downward capable of supplying a ring shaped adhesive liquid film and/or a dot-shaped adhesive liquid film onto an optical disc substrate while the nozzle(s) is spinning, an upper mounting support opposed to the lower mounting support capable of mounting an optical disc substrate, and a lifting member capable of moving the lower mounting support toward the upper mounting support (Figures 1, 3, and 6A-6D and Column 4, lines 43-51 and Column 5, lines 10-23 and 51-57 and Column 6, lines 1-3 and Column 6, lines 60-67).

6. Claims 4, 5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuka et al. and Naka et al. as applied to claims 1, 2, 10-12, 14 and 15 above, and further in view of Hayashi et al. (U.S. Patent 5,102,629).

Otsuka et al. and Naka et al. teach all of the limitations in claims 4, 5, 7, and 8 except for a specific teaching of the electric power supply generating alternating or direct current, it being noted at least one of alternating or direct current must be present such that the electrodes are capable of forming an electric field therebetween. It would have been obvious to one of ordinary

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skill in the art at the time the invention was made for the electric power supply in Otsuka et al. as modified by Naka et al. to generate one of alternating or direct current as was well known to form an electric field between two electrodes as shown for example by Hayashi et al. as only the expected results would be achieved.

Hayashi et al. are exemplary of forming an electric field between two electrodes by supplying one of alternating or direct current to the electrodes (Column 1, lines 13-17).

7. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuka et al., Naka et al., and Kotoyori et al. as applied to claims 3, 13, and 16 above, and further in view of Hayashi et al.

Claims 6 and 9 are rejected in the same manner as that set forth above in paragraph 6.

### Response to Arguments

8. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection. In view of applicants amendment the previous rejections over Otsuka et al. in view of Head et al. (EP235539) and Morley (U.S. Patent 4,724,296) are withdrawn.

#### Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John L. Goff

JEFF H. AFTERGUT PRIMARY EXAMINER GROUP 1300